

# Abstracts

## K<sub>sub</sub> u-Band Spacecraft Parametric Amplifier

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*E. Kraemer, J. Leeper and J. Whelehan. "K<sub>sub</sub> u-Band Spacecraft Parametric Amplifier." 1974 S-MTT International Microwave Symposium Digest of Technical Papers 74.1 (1974 [MWSYM]): 222-224.*

A spacecraft 15-GHz parametric amplifier having a 500-MHz 1-dB bandwidth at 18-dB gain and 140 K noise temperature has been demonstrated. The 14-ounce unit incorporates the amplifier mount, 5-port circulators, varactor doubler, Gunn oscillator, and pump source. The maximum dc input of 11 watts includes stabilization over -5 to +50°C in a thermal-vacuum environment.

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